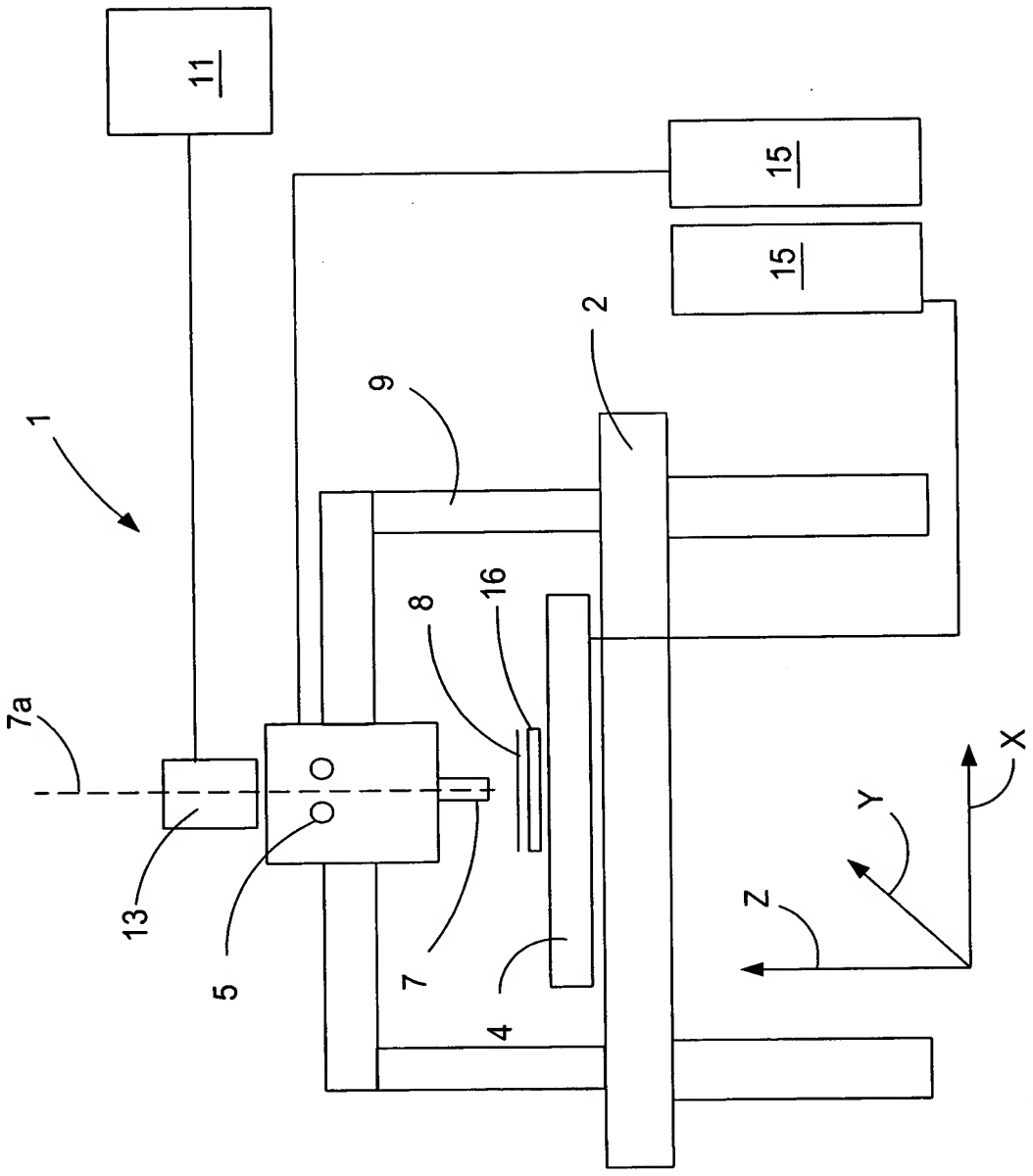

Fig. 1

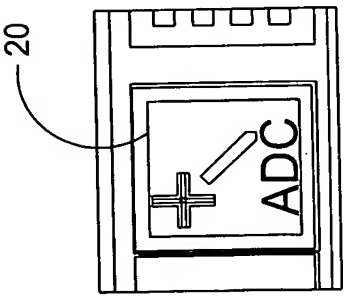
20
ADC

Fig. 2

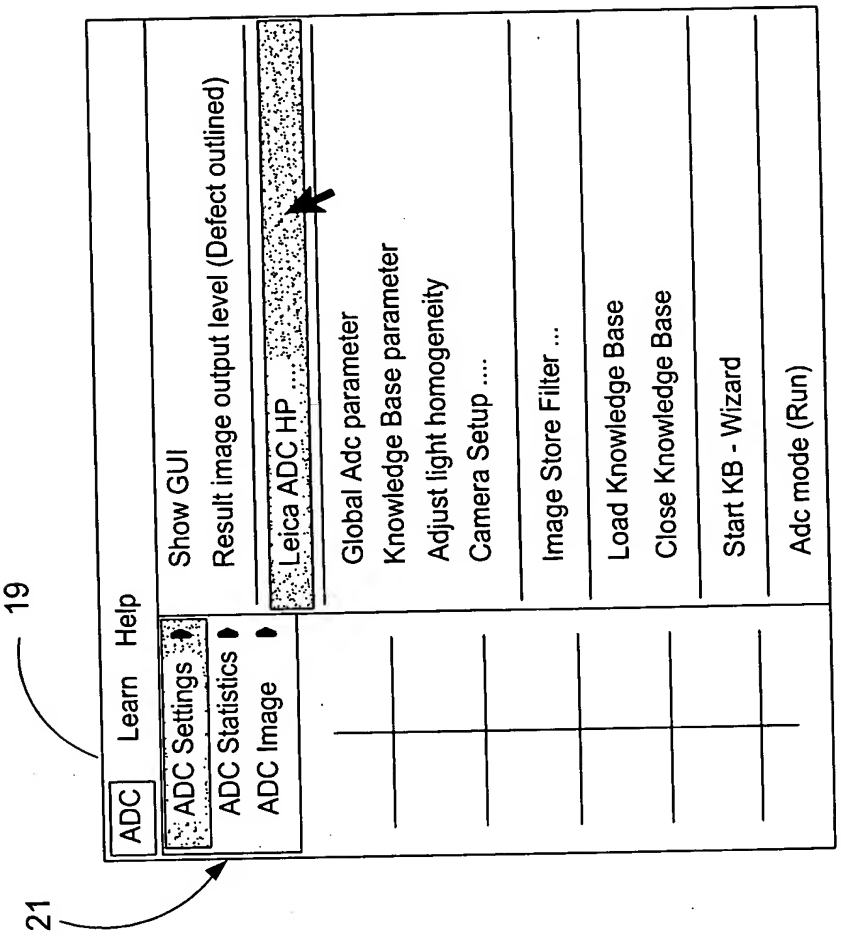
19
21
ADC
Learn
Help
ADC Settings
ADC Statistics
ADC Image
Show GUI
Result image output level (Defect outlined)
Leica ADC HP ....
Global Adc parameter
Knowledge Base parameter
Adjust light homogeneity
Camera Setup ....
Image Store Filter ...
Load Knowledge Base
Close Knowledge Base
Start KB - Wizard
Adc mode (Run)

Fig. 3

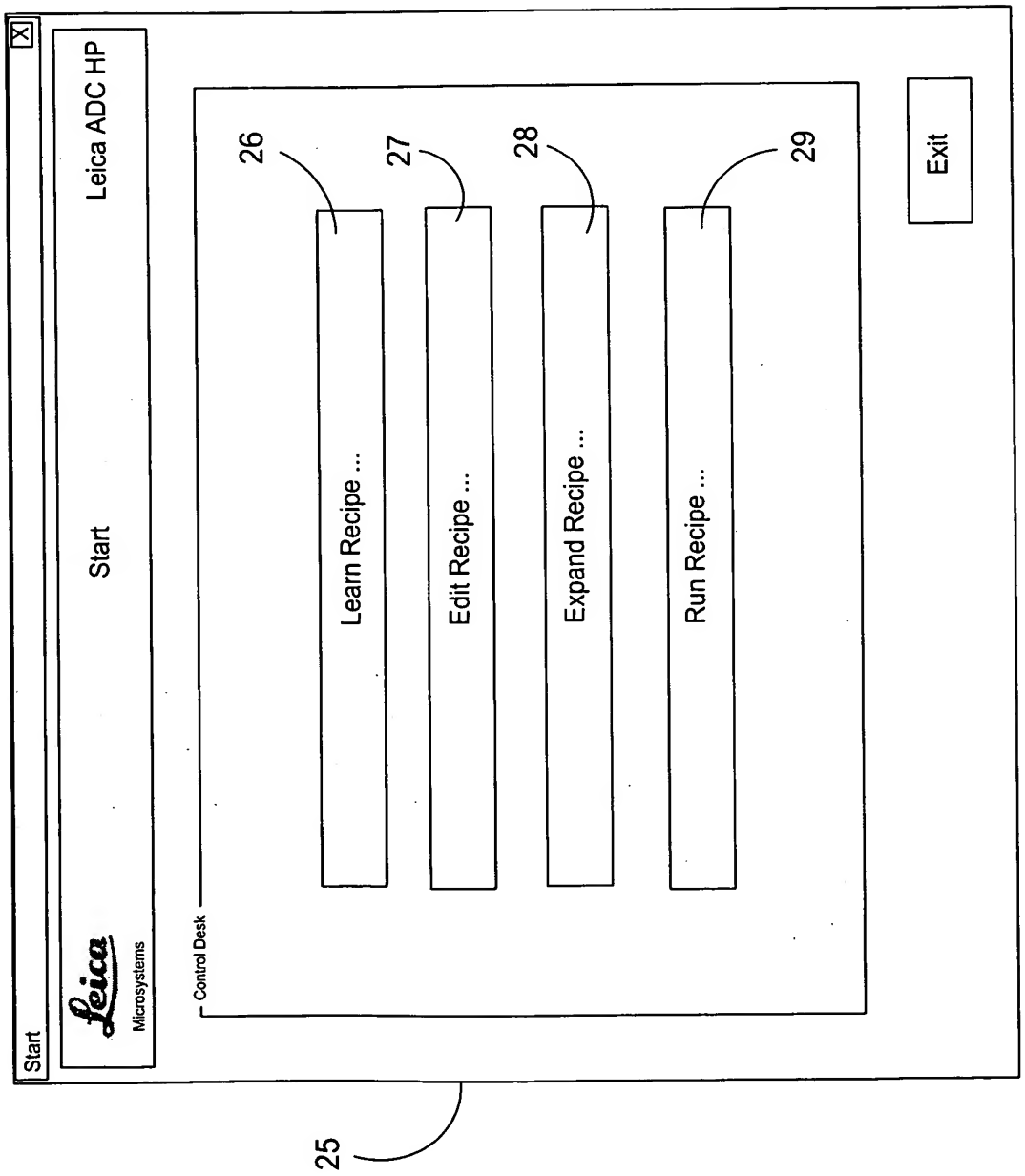
Start
Leica ADC HP
Start
Leica
Microsystems
Control Desk
Learn Recipe ...
Edit Recipe ...
Expand Recipe ...
Run Recipe ...
Exit
25
26
27
28
29

Fig. 4

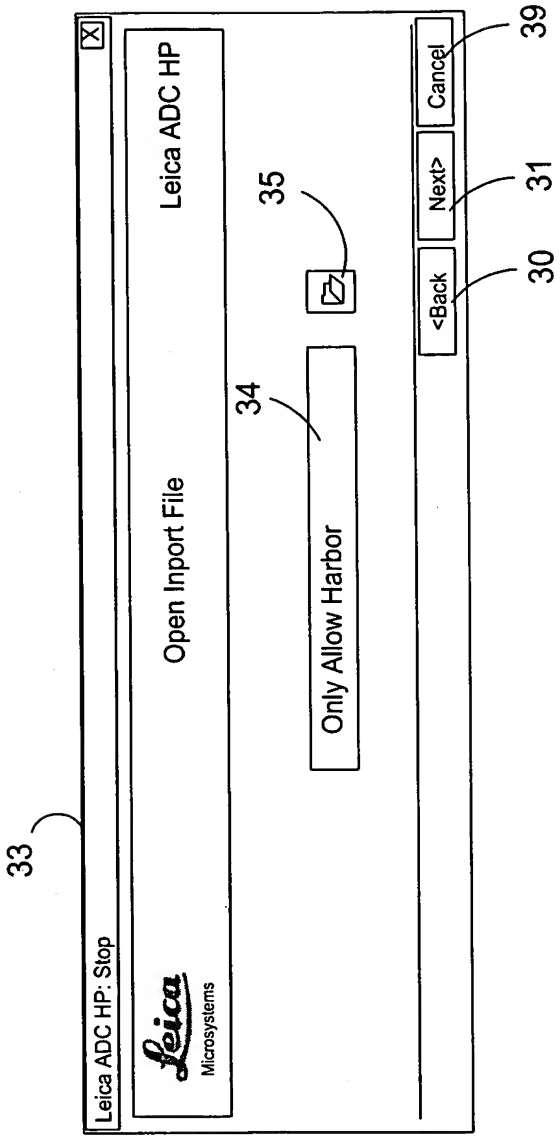
33
Leica ADC HP: Stop
Leica ADC HP
Open Inport File
Only Allow Harbor
34
35
<Back
Next>
Cancel
30
31
39

Fig. 5

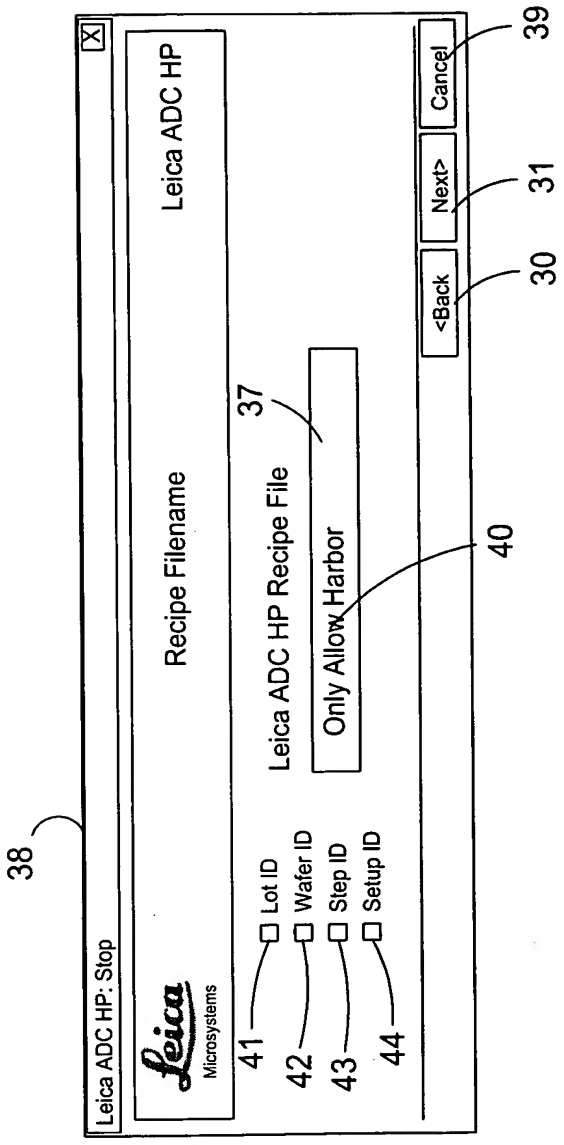
38
Leica ADC HP: Stop
Leica ADC HP
Recipe Filename
Leica ADC HP Recipe File
Only Allow Harbor
37
40
Lot ID
Wafer ID
Step ID
Setup ID
41
42
43
44
<Back
Next>
Cancel
30
31
39

Fig. 6

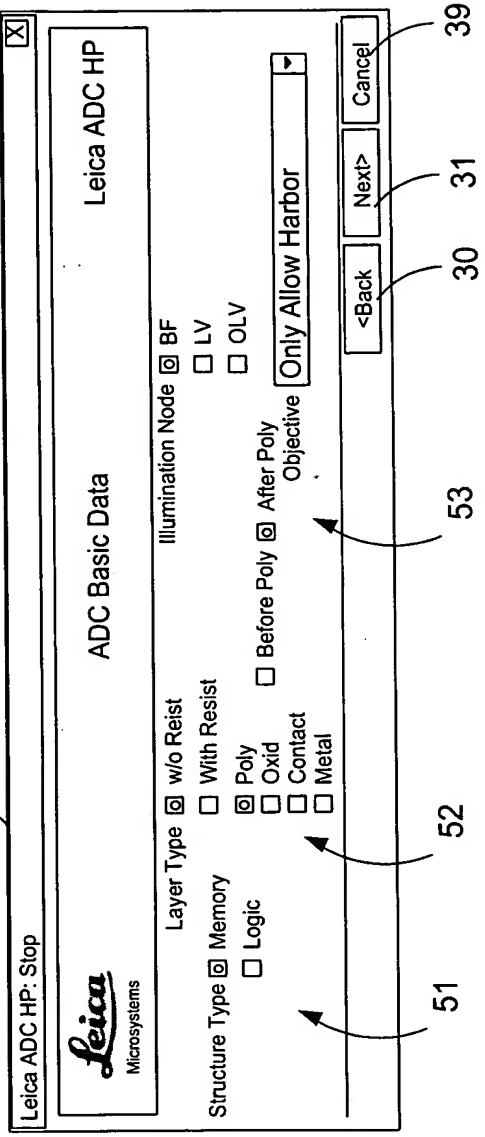
50
Leica ADC HP: Stop
Leica
Microsystems
ADC Basic Data
Leica ADC HP
Layer Type
w/o Reist
With Resist
Illumination Node
BF
LV
OLV
Structure Type
Memory
Logic
Poly
Oxid
Contact
Metal
Before Poly
After Poly
Objective
Only Allow Harbor
<Back
Next>
Cancel
51
52
53
30
31
39

Fig. 7

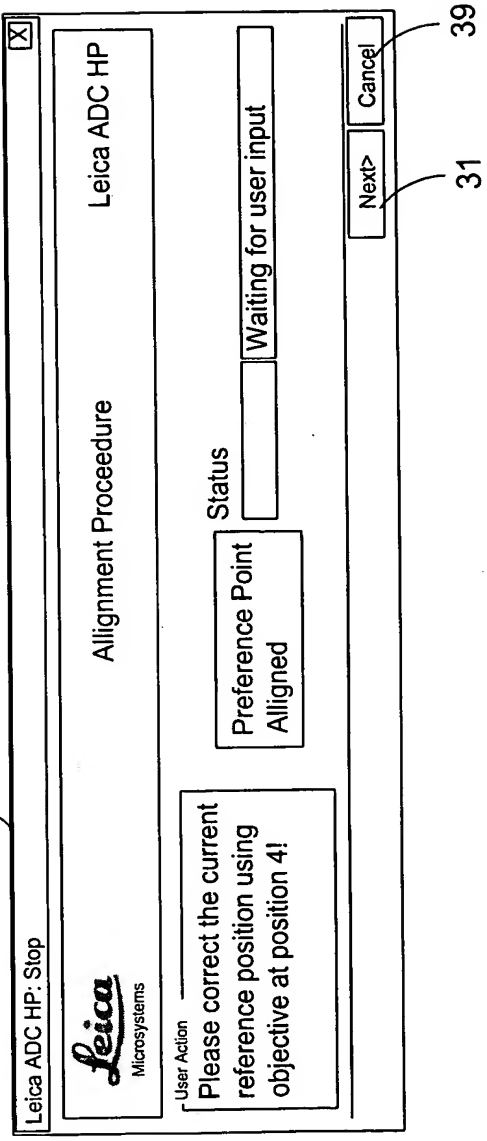
60
Leica ADC HP: Stop
Leica
Microsystems
Allignment Proceedure
Leica ADC HP
User Action
Please correct the current reference position using objective at position 4!
Preference Point Alligned
Status
Waiting for user input
Next>
Cancel
31
39

Fig. 8

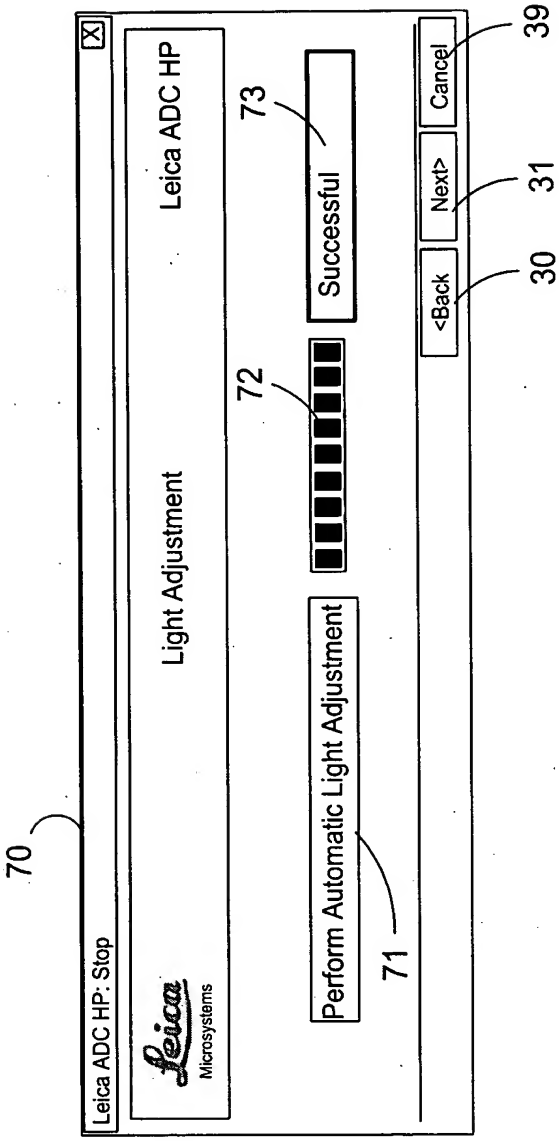
70
Leica ADC HP: Stop
Leica ADC HP
Light Adjustment
Perform Automatic Light Adjustment
71
72
73
Successful
<Back
Next>
Cancel
30
31
39

Fig. 9

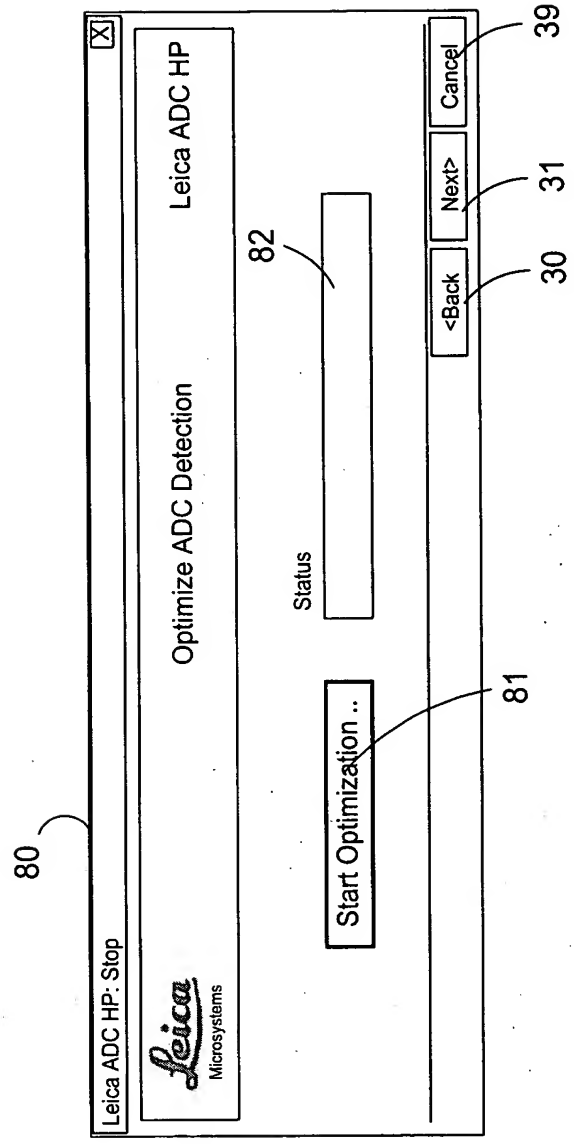
80
Leica ADC HP: Stop
Leica ADC HP
Optimize ADC Detection
Start Optimization ..
81
Status
82
<Back
Next>
Cancel
30
31
39

Fig. 10

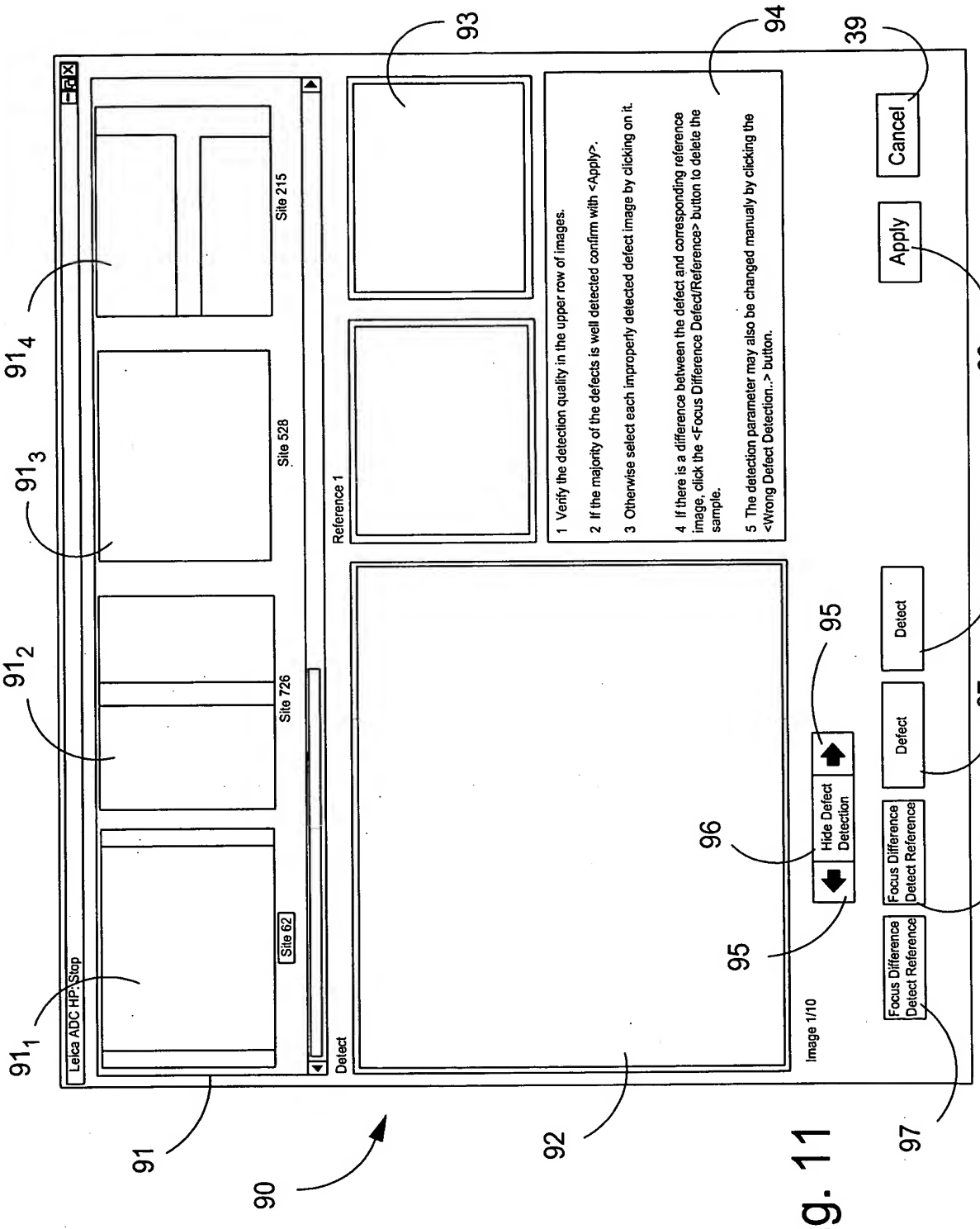
Leica ADC HP:Stop
Site 62
Site 726
Site 528
Site 215
Detect
Reference 1
1 Verify the detection quality in the upper row of images.
2 If the majority of the defects is well detected confirm with <Apply>.
3 Otherwise select each improperly detected defect image by clicking on it.
4 If there is a difference between the defect and corresponding reference image, click the <Focus Difference Defect/Reference> button to delete the sample.
5 The detection parameter may also be changed manualy by clicking the <Wrong Defect Detection..> button.
Hide Defect Detection
Image 1/10
Focus Difference Detect Reference
Defect
Focus Difference Detect Reference
Detect
Apply
Cancel
91_1
91_2
91_3
91_4
91
90
92
93
94
95
96
97
86
87
88
89
39

Fig. 11

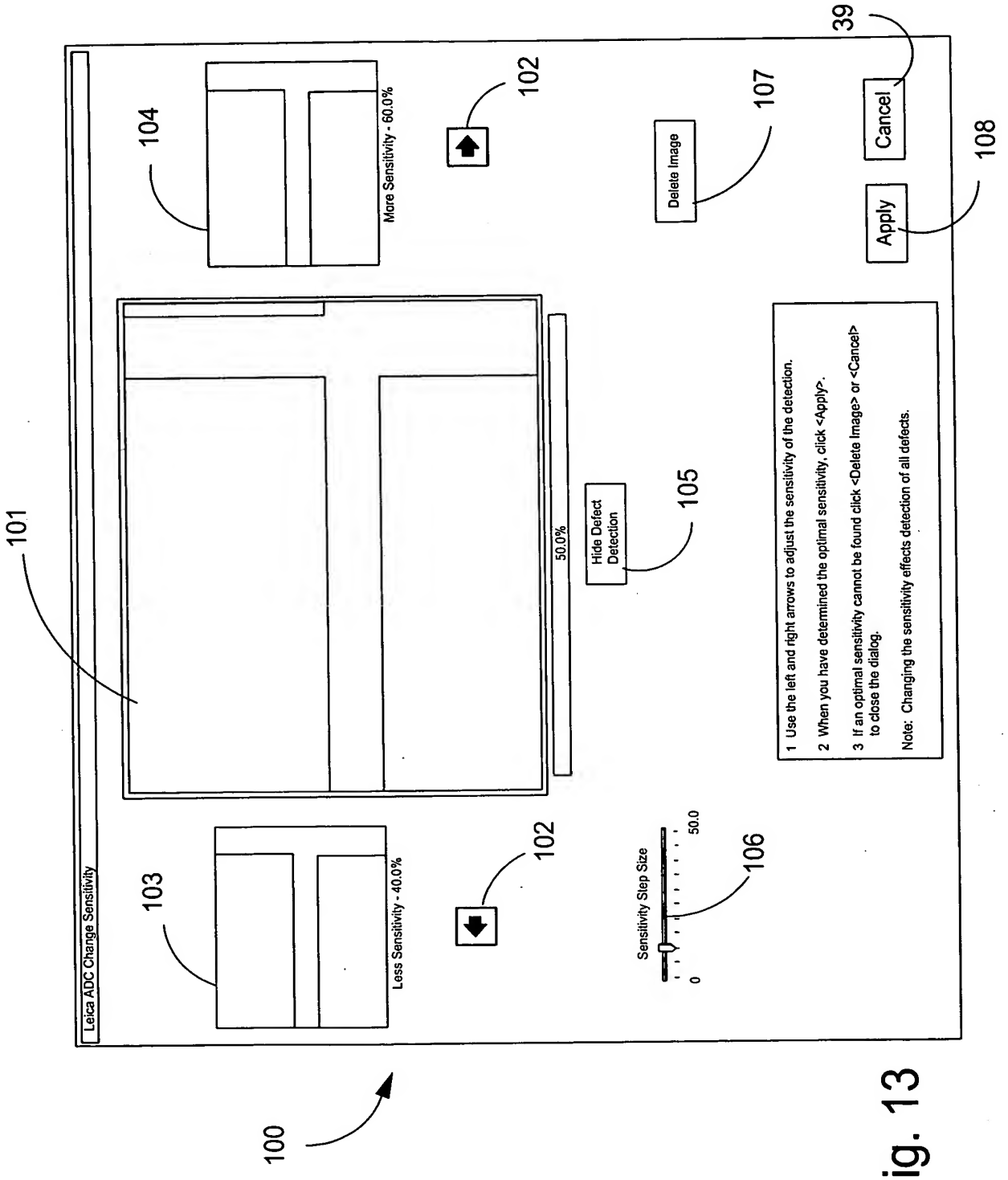
Leica ADC Change Sensitivity
More Sensitivity - 60.0%
Less Sensitivity - 40.0%
50.0%
Hide Defect Detection
Delete Image
Cancel
Apply
Sensitivity Step Size
0
50.0
1 Use the left and right arrows to adjust the sensitivity of the detection.
2 When you have determined the optimal sensitivity, click <Apply>.
3 If an optimal sensitivity cannot be found click <Delete Image> or <Cancel> to close the dialog.
Note: Changing the sensitivity effects detection of all defects.
100
101
102
102
103
104
105
106
107
108
39

Fig. 13

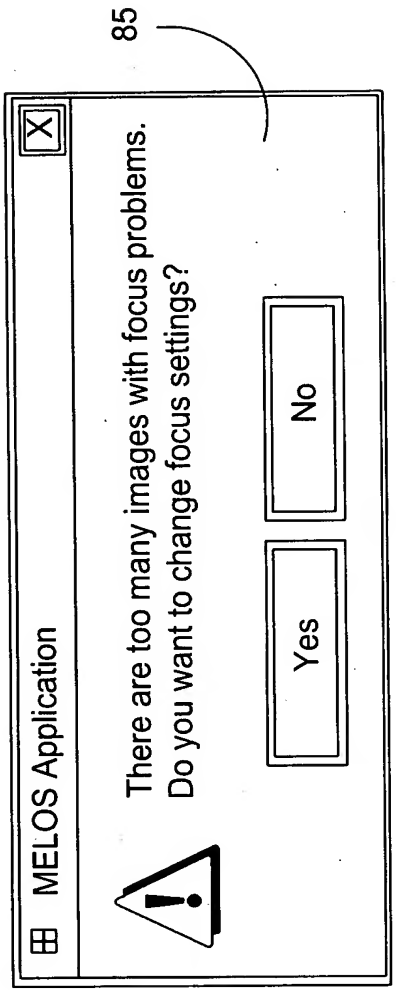
85
MELOS Application
There are too many images with focus problems.
Do you want to change focus settings?
Yes
No

Fig. 12

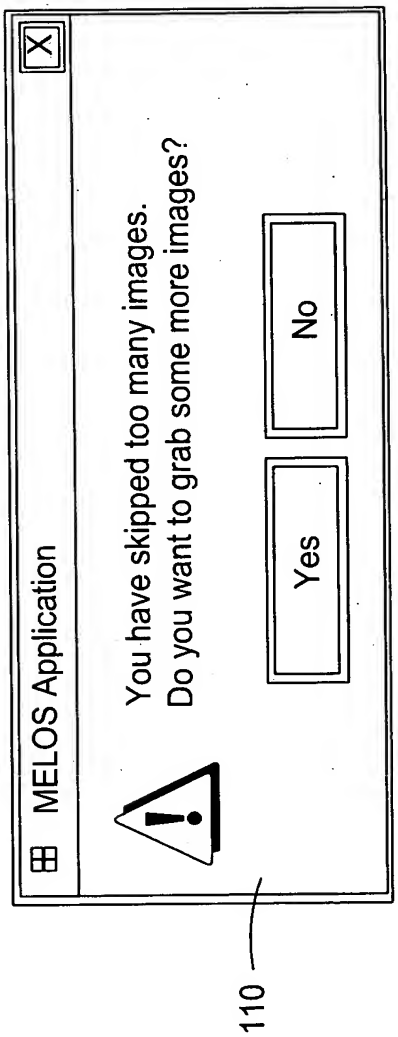
MELOS Application
You have skipped too many images.
Do you want to grab some more images?
Yes
No
110

Fig. 14

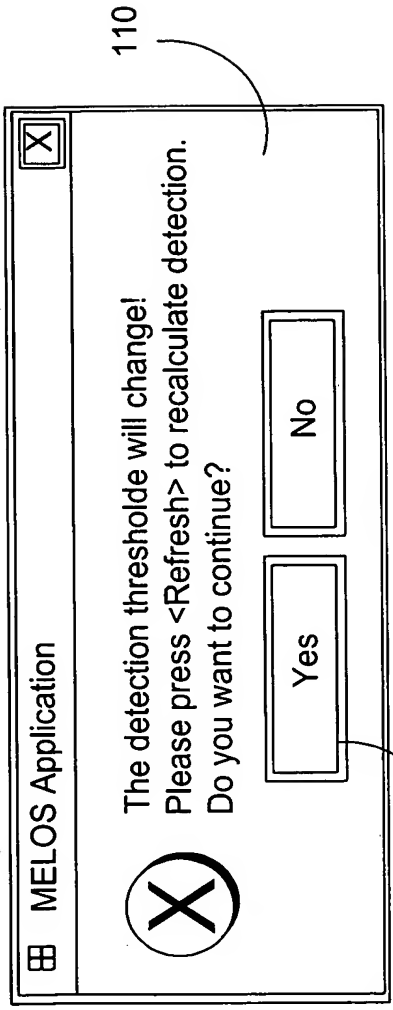
MELOS Application
The detection thresholde will change!
Please press <Refresh> to recalculate detection.
Do you want to continue?
Yes
No
110
111

Fig. 15

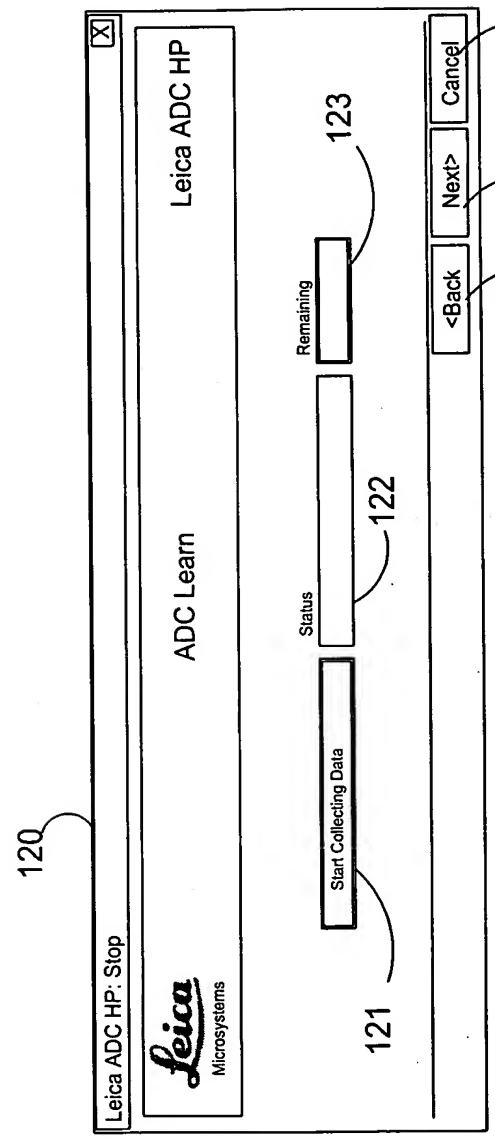
Leica ADC HP: Stop
Leica ADC HP
ADC Learn
Leica
Microsystems
Status
Remaining
Start Collecting Data
<Back
Next>
Cancel
120
121
122
123
30
31
39

Fig. 16

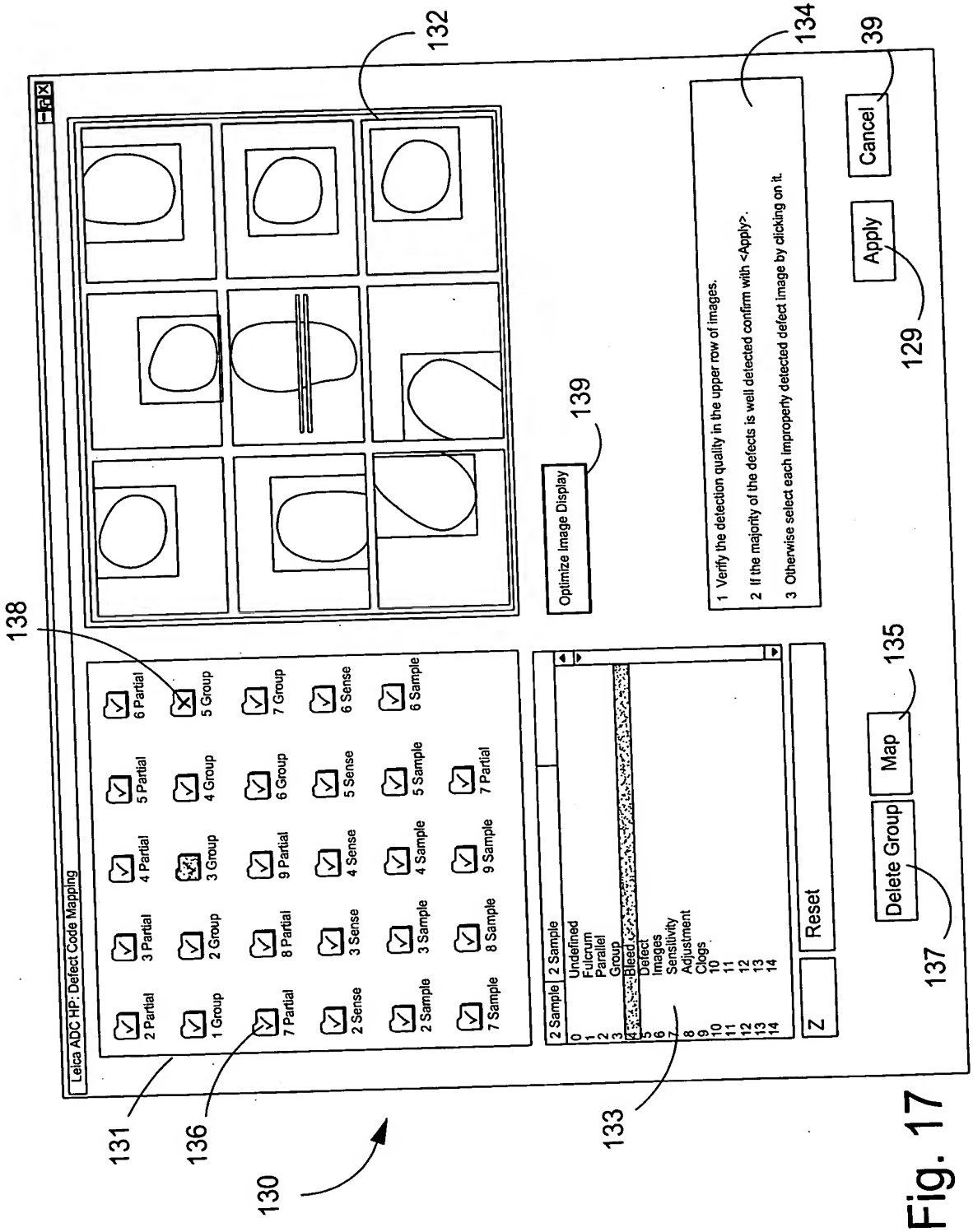
Leica ADC HP: Defect Code Mapping
2 Partial
3 Partial
4 Partial
5 Partial
6 Partial
1 Group
2 Group
3 Group
4 Group
5 Group
7 Partial
8 Partial
9 Partial
6 Group
7 Group
2 Sense
3 Sense
4 Sense
5 Sense
6 Sense
2 Sample
3 Sample
4 Sample
5 Sample
6 Sample
7 Sample
8 Sample
9 Sample
7 Partial
2 Sample
2 Sample
0 Undefined
1 Fulcrum
2 Parallel
3 Group
4 Bleed
5 Defect
6 Images
7 Sensitivity
8 Adjustment
9 Clogs
10
11
12
13
14
Z
Reset
Optimize Image Display
1 Verify the detection quality in the upper row of images.
2 If the majority of the defects is well detected confirm with <Apply>.
3 Otherwise select each improperly detected defect image by clicking on it.
Apply
Cancel
Delete Group
Map
130
131
132
133
134
135
136
137
138
139
129
39

Fig. 17

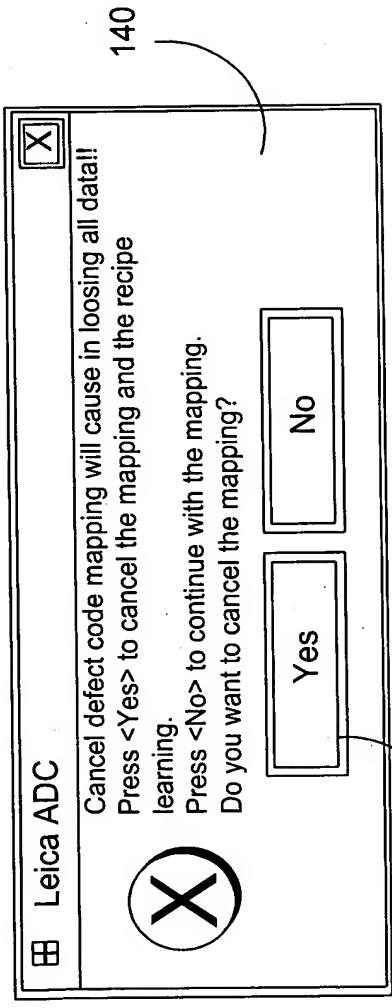
Leica ADC
Cancel defect code mapping will cause in loosing all data!!
Press <Yes> to cancel the mapping and the recipe learning.
Press <No> to continue with the mapping.
Do you want to cancel the mapping?
Yes
No
140
141

Fig. 18

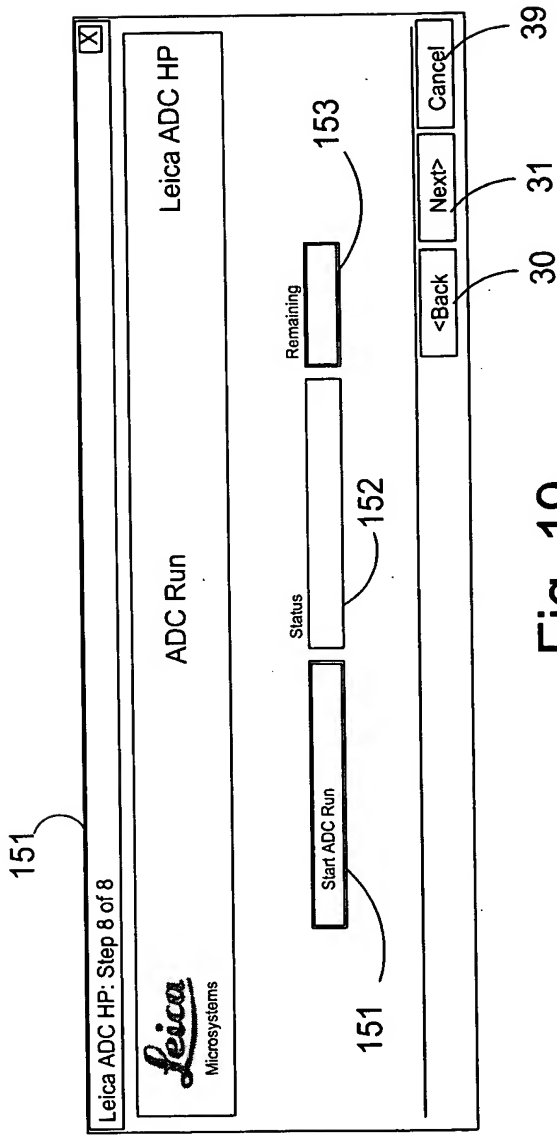
Leica ADC HP: Step 8 of 8
Leica ADC HP
ADC Run
Leica
Microsystems
Start ADC Run
Status
Remaining
<Back
Next>
Cancel
151
152
153
30
31
39

Fig. 19

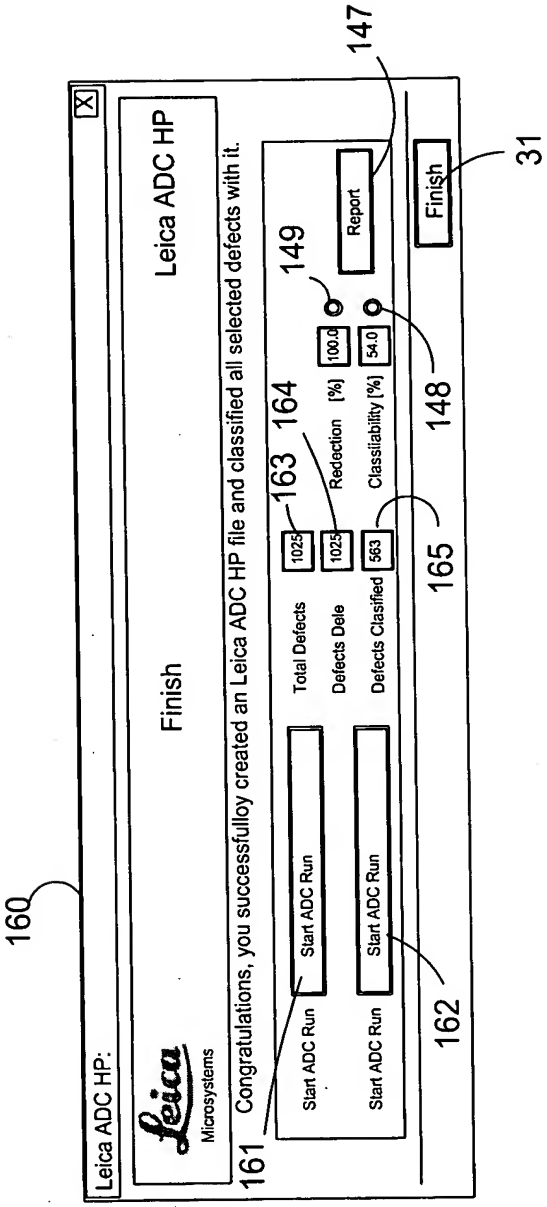
160
Leica ADC HP:
Leica ADC HP
Finish
Leica
Microsystems
161
Congratulations, you successfulloy created an Leica ADC HP file and classified all selected defects with it.
Start ADC Run
Start ADC Run
Start ADC Run
Total Defects
Defects Dele
Defects Clasified
1025
1025
563
163
164
165
Redection [%]
Classiability [%]
100.0
54.0
148
149
147
Report
Finish
31
162

Fig. 20

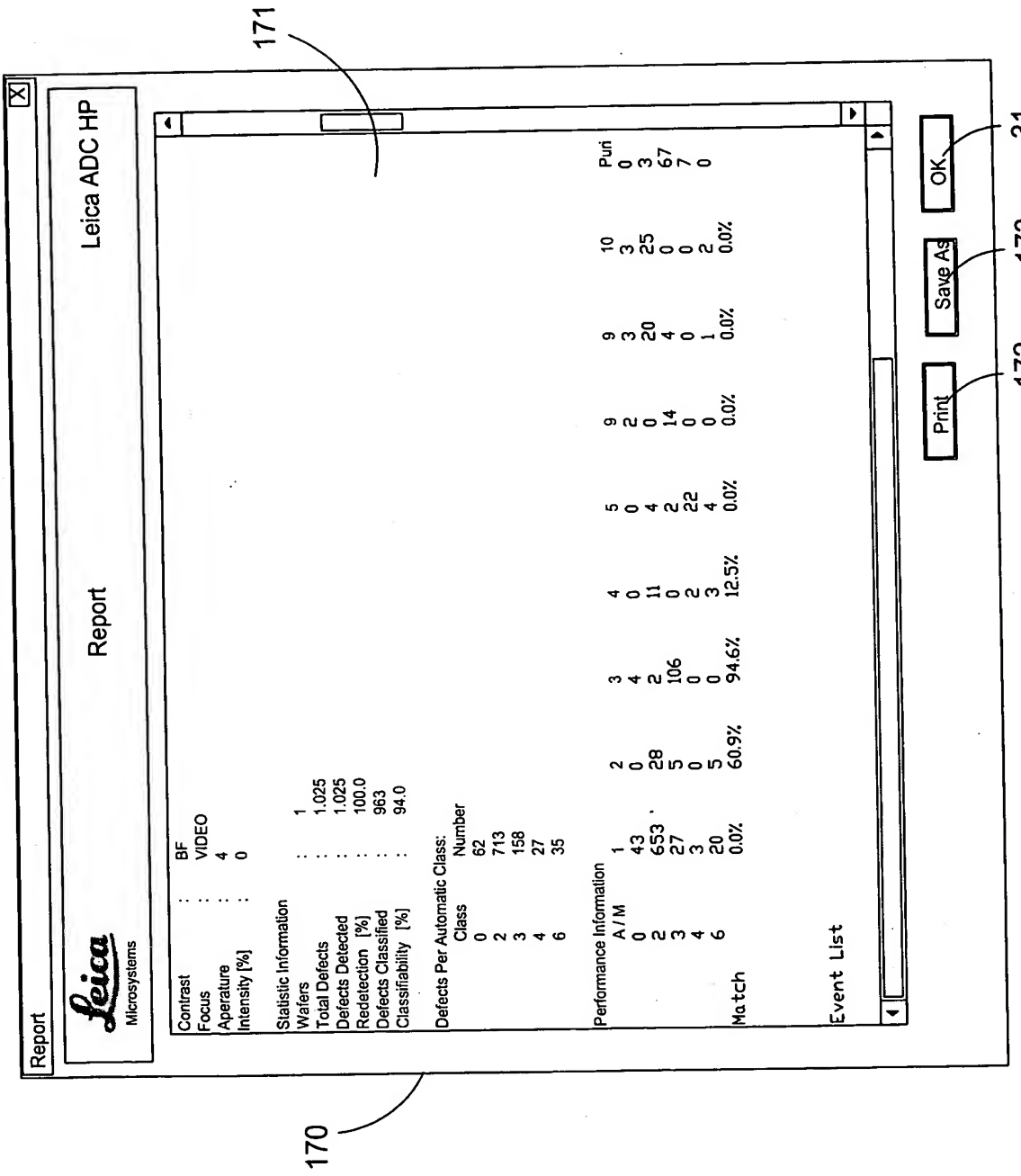
Report
Leica
Microsystems
Report
Leica ADC HP
Contrast : BF
Focus : VIDEO
Aperature : 4
Intensity [%] : 0
Statistic Information : 1
Wafers : 1.025
Total Defects : 1.025
Defects Detected : 100.0
Redetection [%] : 963
Defects Classified : 94.0
Classifiability [%] : 35
Defects Per Automatic Class:
Class Number
0 62
2 713
3 158
4 27
6 35
Performance Information
A / M 1 2 3 4 5 9 9 10 Puri
0 43 0 4 0 0 2 3 3 0
2 653 28 2 11 4 0 20 25 67
3 27 5 106 0 2 14 4 0 7
4 3 0 0 2 22 0 0 0 0
6 20 5 0 3 4 0 1 2
Match 0.0% 60.9% 94.6% 12.5% 0.0% 0.0% 0.0% 0.0%
Event List
Print
Save As
OK
170
171
172
173
31

Fig. 21

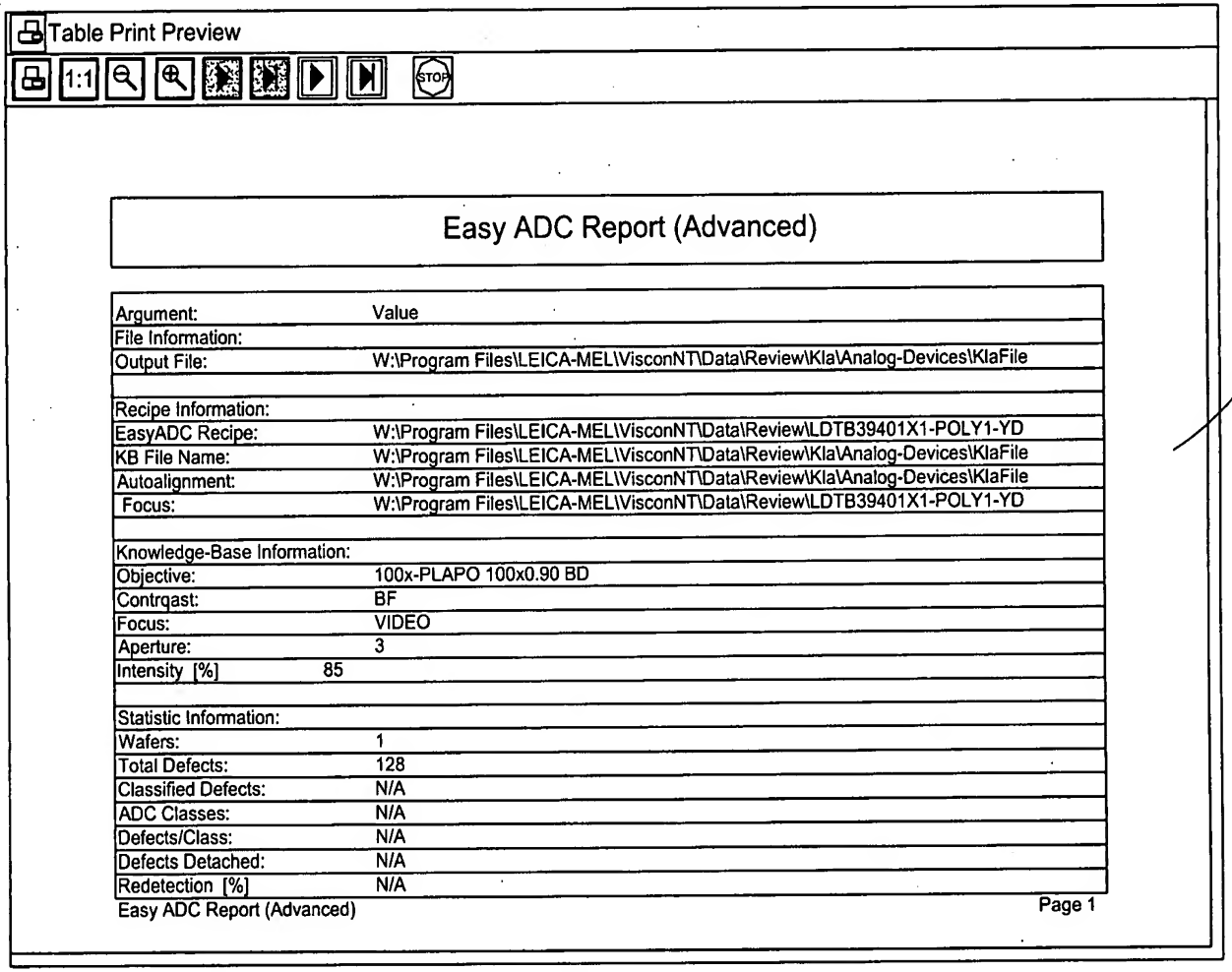
Table Print Preview
1:1
STOP
Easy ADC Report (Advanced)
Argument: Value
File Information:
Output File: W:\Program Files\LEICA-MEL\VisconNT\Data\Review\Kla\Analog-Devices\KlaFile
Recipe Information:
EasyADC Recipe: W:\Program Files\LEICA-MEL\VisconNT\Data\Review\LDTB39401X1-POLY1-YD
KB File Name: W:\Program Files\LEICA-MEL\VisconNT\Data\Review\Kla\Analog-Devices\KlaFile
Autoalignment: W:\Program Files\LEICA-MEL\VisconNT\Data\Review\Kla\Analog-Devices\KlaFile
Focus: W:\Program Files\LEICA-MEL\VisconNT\Data\Review\LDTB39401X1-POLY1-YD
Knowledge-Base Information:
Objective: 100x-PLAPO 100x0.90 BD
Contrqast: BF
Focus: VIDEO
Aperture: 3
Intensity [%] 85
Statistic Information:
Wafers: 1
Total Defects: 128
Classified Defects: N/A
ADC Classes: N/A
Defects/Class: N/A
Defects Detached: N/A
Redetection [%] N/A
Easy ADC Report (Advanced)
Page 1
180

Fig. 22